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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Rao Salapaka

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PERKINS COIE LLP/MSFT

P. O. BOX 1247

SEATTLE, WA 98111-1247

EXAMINER

LANIER, BENJAMIN E

ART UNIT

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/792,349	Applicant(s) SALAPAKA ET AL.	
	Examiner BENJAMIN E. LANIER	Art Unit 2432	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 September 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 and 17-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 17-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. Applicant's amendment filed 25 September 2008 amends claim 1. Claim 15 has been cancelled. Claims 17-28 have been added. Applicant's amendment has been fully considered and entered.

Response to Arguments

2. Applicant's arguments with respect to claims have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 26-28 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

5. Claims 26-28 recites the limitation "the datagram". There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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7. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

8. Claims 1-4, 23-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baugher, The Secure Real-Time Transport Protocol, in view of Minhazuddin, U.S. Publication No. 2004/0073641, and in further view of Devine, U.S. Patent No. 6,606,708. Referring to claims 1, 23-25, Baugher discloses the secure real-time transport protocol wherein a sender transmits encrypted SRTP packets to a receiver (Page 10). The receiver receives the encrypted packets (Page 10), which meets the limitation of receiving from a plurality of sending clients an encrypted media packet using Real-time Transport protocol (RTP) message format at a media-relay server, the encrypted media packet being sent to the destination address and the destination port, wherein a plurality of sending clients send media packets to the destination address and the destination port. The cryptographic context id included in the packet header (Figure 1) uniquely identifies the cryptographic information required to process the packet (Page 6, 3.2 & Page 9), which meets the limitation of establishing a plurality of security associations (SAs) for dialogs between sending clients and receiving clients, each SA including source information of a sending client and an indication of a receiving client, determining whether a sending client's Security Association (SA) exists using the sender's source information receiving with the media packet. If a valid cryptographic context cannot be found the packet is dropped (Page 9), which meets the

limitation of if no SA exists, dropping the media packet. If the receiver determines the cryptographic context used (Page 10, step 1), the packet is decrypted (Page 11, step 6), which meets the limitation of if a SA does exist, decrypting the media packet. Baugher does not disclose that the encrypted packets are received and decrypted at a server. Minhazuddin discloses session monitor that receives RTP packets for a network (Figure 2, 224). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have the encrypted packets, of Baugher, be received and processed by a network monitor, such as the session monitor in Minhazuddin, in order to provide the network with a means of determining network problems while providing instantaneous troubleshooting as taught by Minhazuddin ([0009]). Baugher further does not describe comparing the SSRC of the decrypted packet to a stored SSRC associated with the session. Minhazuddin discloses that the session monitor compares the SSRC of received packets to SSRCs associated with current sessions, and if they do not match, the packet is not accepted (i.e. dropped)([0039]-[0040]), which meets the limitation of obtaining a SSRC from the SA, comparing the SSRC identifier included in the RTP packet with the SSRC obtained from the SA, if the SSRC included in the RTP packet does not match the SSRC obtained from the SA, dropping the media packet, and if the SSRC in the RTP packet matches to the SSRC obtained from the SA, forwarding the packet to a receiving client indicated in the SA based on the sender's source information. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have the SSRC of the decrypted SRTP packets in Baugher be compared with SSRC associated with the sessions in a session monitor in order to confirm that the user of the end point is a legitimate requester by confirming that the session id represents an active session as taught by Minhazuddin ([0040]). Furthermore,

this comparison would occur after the packet has been decrypted because the SSRC in the encrypted packet of Baugher is included in the encrypted section of the packet (Page 14, Figure 2). Minhazuddin does not disclose that the session monitor server exists in a DMZ. Devine discloses utilizing servers in a DMZ connected between an internal and external firewall (Figs. 4-5), which meets the limitation of a single destination address and a single destination port of a firewall, the media-relay server is connected to a external firewall through which encrypted packets are received from sending clients and an internal firewall through which decrypted packets are forwarded to receiving clients. It would have been obvious to one of ordinary skill in the art at the time the invention was made for the session monitor of Minhazuddin to be implemented in a DMZ as shown in Devine in order to prevent a direct connection between any external and any internal network or intranet computer as taught by Devine (Col. 22, lines 18-62).

Referring to claim 2, Baugher discloses that the cryptographic context is determined based on the network address and port number of the sender contained in the packet header (Page 9), which meets the limitation of the source information retrieved comprises a source Internet Protocol (IP) address and port number found in the RTP message format. Baugher does not disclose that the encrypted packets are received and decrypted at a server. Minhazuddin discloses session monitor that receives RTP packets for a network (Figure 2, 224). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have the encrypted packets, of Baugher, be received and processed by a network monitor, such as the session monitor in Minhazuddin, in order to provide the network with a means of determining

network problems while providing instantaneous troubleshooting as taught by Minhazuddin ([0009]).

Referring to claims 3, 4, Baugher discloses that the data packets can represent audio or video data (Page 5), which meets the limitation of the media packet comprises audio/video data.

9. Claims 17-22, 26-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baugher, The Secure Real-Time Transport Protocol, in view of Minhazuddin, U.S. Publication No. 2004/0073641, in view of Dacosta, U.S. Patent No. 7,324,523, and further in view of Devine, U.S. Patent No. 6,606,708. Referring to claims 17-19, 21, 27, Baugher discloses the secure real-time transport protocol wherein a sender transmits encrypted SRTP packets to a receiver (Page 10). The receiver receives the encrypted packets (Page 10), which meets the limitation of receiving from each of the sending client a packet sent to the destination address and the destination port, an encrypted packet and source information of the sending client. The cryptographic context id included in the packet header (Figure 1) uniquely identifies the cryptographic information required to process the packet (Page 6, 3.2 & Page 9), which meets the limitation of for each of a plurality of sending clients, establishing a security association (SAs) for a dialog between the sending client and a receiving client, the security association including an encryption key for decrypting packets sent from the sending client to the receiving client via the destination address and the destination port, a synchronization source identifier that uniquely identifies the sending client within the dialog, source information of the sending client, and an indication of the receiving client, the source information is a synchronization source identifier. If a valid cryptographic context cannot be found the packet is dropped (Page 9), which meets the limitation upon receiving the packet, when no security association has been established

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that includes the source information of the received packet, dropping the encrypted packet. If the receiver determines the cryptographic context used (Page 10, step 1), the packet is decrypted (Page 11, step 6), which meets the limitation of when a security association has been established that includes the source information of the received packet, decrypting the encrypted packet using the encryption key of the established security association. Baugher does not disclose that the encrypted packets are received and decrypted at a server. Minhazuddin discloses session monitor that receives RTP packets for a network (Figure 2, 224). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have the encrypted packets, of Baugher, be received and processed by a network monitor, such as the session monitor in Minhazuddin, in order to provide the network with a means of determining network problems while providing instantaneous troubleshooting as taught by Minhazuddin ([0009]). Baugher further does not describe comparing the SSRC of the decrypted packet to a stored SSRC associated with the session. Minhazuddin discloses that the session monitor compares the SSRC of received packets to SSRCs associated with current sessions, and if they do not match, the packet is not accepted (i.e. dropped)([0039]-[0040]), which meets the limitation of obtaining a SSRC from the SA, comparing the SSRC identifier included in the RTP packet with the SSRC obtained from the SA, if the SSRC included in the RTP packet does not match the SSRC obtained from the SA, dropping the media packet, and if the SSRC in the RTP packet matches to the SSRC obtained from the SA, forwarding the packet to a receiving client indicated in the SA based on the sender's source information. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have the SSRC of the decrypted SRTP packets in Baugher be compared with SSRC associated with the sessions in a session monitor in order to

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confirm that the user of the end point is a legitimate requester by confirming that the session id represents an active session as taught by Minhazuddin ([0040]). Furthermore, this comparison would occur after the packet has been decrypted because the SSRC in the encrypted packet of Baugher is included in the encrypted section of the packet (Page 14, Figure 2). Baugher does not specify utilizing UDP, which creates datagrams for the packets, to communicate the SRTP data. However, it would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the UDP protocol to communication the SRTP data of Baugher because RTP delivers delay-sensitive information and UDP provides the ability to transmit delay-sensitive information as taught by Dacosta (Col. 2, lines 35-48). Minhazuddin does not disclose that the session monitor server exists in a DMZ. Devine discloses utilizing servers in a DMZ connected between an internal and external firewall (Figs. 4-5), which meets the limitation of a single destination address and a single destination port of a firewall, the media-relay server is connected to a external firewall through which datagrams are received from sending clients and an internal firewall through which packets are forwarded to receiving clients. It would have been obvious to one of ordinary skill in the art at the time the invention was made for the session monitor of Minhazuddin to be implemented in a DMZ as shown in Devine in order to prevent a direct connection between any external and any internal network or intranet computer as taught by Devine (Col. 22, lines 18-62).

Referring to claims 20, 26, source address and source port information in a datagram is inherent to the UDP protocol. It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the UDP protocol to communication the SRTP data of

Baughner because RTP delivers delay-sensitive information and UDP provides the ability to transmit delay-sensitive information as taught by Dacosta (Col. 2, lines 35-48).

Referring to claims 22, 28, Baughner discloses that only the payload is encrypted (Page 10, section 5), which meets the limitation of the source information of the datagram is not encrypted. It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the UDP protocol to communication the SRTP data of Baughner because RTP delivers delay-sensitive information and UDP provides the ability to transmit delay-sensitive information as taught by Dacosta (Col. 2, lines 35-48).

Conclusion

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to BENJAMIN E. LANIER whose telephone number is (571)272-3805. The examiner can normally be reached on M-Th 7:00am-5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gilberto Barron can be reached on 571-272-3799. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Benjamin E Lanier/
Primary Examiner, Art Unit 2432